

GEDO : A COMPLEX EMERGENCY

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INTRODUCTION

The 'structural vulnerability' of Gedo region has created an ongoing situation of crisis which has been compounded by three years of successive poor rains and related drought conditions. Structural vulnerability has emerged over the last three decades as a result of a series of socio-political events causing a consistent influx of people and livestock resulting in an overcrowded and politically divided territory and fragmentation of the administration in addition to widespread insecurity. These events, in turn, have led to an increased pressure on degraded rangelands, undermined coping mechanisms, divisions within the community, sub-standard social facilities and an overall crisis in the production and exchange systems. All these elements have contributed to a deterioration in the civil and productive infrastructure and, as a consequence, to chronic depletion of livelihood assets and capacities to cope.

The situation in Gedo is often described as a 'complex emergency'. A 'complex emergency' is a highly destructive situation as it radically increases the demands placed on a fragile, political, economic, environmental and social system while simultaneously destroying that very same system. (S. Lautze, 1997)

External assistance to a 'complex emergency' should design interventions that encourage self-sufficiency and productivity, while addressing the key features of this vicious circle. **Complex emergencies require strategic assessment and cross-sector analysis and intervention.**

In this FSAU Focus, the livelihoods of pastoralists will be examined in detail as they currently represent the majority and the most vulnerable group in the region. They are currently enduring the long dry *Jilaal* season and their livelihoods are already extremely over-stretched.

The timing and the intensity of the next *Gu* rains (beginning of April) will be critical in alleviating the worst effects of this dry spell but

still major problems are likely to be seen in the areas of nutrition and health, if and when the *Gu* rains start. Malaria and respiratory infections will become a risk due to people's weakened health, as already experienced in 1999. In addition, on arrival of the *Gu* rains, the remaining animals in the region, in their current physical condition are unlikely to survive the sudden climate change due also to their physical weakness.

In Northern Gedo, poor agro-pastoral households are also particularly vulnerable to food insecurity due to successive crop failures and because they are highly dependent on the crop production of neighboring regions.

The FSAU Gedo Focus produced in 2000, stated that 'a framework must be created to address the root causes of malnutrition and food insecurity in this specific area of Somalia'. In this Focus, FSAU will follow up on that statement by analysing the critical ongoing processes occurring in the region and their impact on the livelihood of local communities and people. By providing relevant information, FSAU hopes to provide an understanding of this complex emergency as well as to stimulate possible interventions which are appropriate to the current environment.

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Indications on the Current Nutritional and Health Situations

Extracts from Belet Hawa survey report and January 2002 nutrition update – FSAU nutritional team

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The measurement of nutritional status in young children is currently the most commonly used indicator of human welfare in Somalia, especially in times of crisis. The recent nutrition survey in Belet Hawa district in northern Gedo (December 2001, FSAU) indicates that the population is in extremely poor condition. The survey results indicate deterioration of nutritional status in Belet Hawa population from the total malnutrition of 21.5% reported by UNICEF in May 2000 to 37% in December 2001. Further analysis of the data also suggested that growth stunting was likely to be common, suggesting significant levels of chronic malnutrition as well as the current acute problem. Malnutrition in villages was noted to be more common than in Belet Hawa town.

Health services have been weakened in Gedo Region both in terms of quality and coverage. Immunisation cover in the rural areas appears to be low and the incidence of communicable diseases such as measles, diarrhoea and upper respiratory tract infections is high.

Low resistance due to poor diet and existing malnutrition combined with inadequate health services and sub optimal child-care practices provide a challenging environment for physically vulnerable groups such as children as well as women of child-bearing age.

Limited food availability (in quantity and quality), poor childcare/feeding practices and high disease incidences combined with low availability to the appropriate care services play key roles in the current poor nutritional status of the population in Belet Hawa District in particular and Gedo Region in general. The long period of stress to the community has led to high proportion of children at great risk of death as implied by the high level of severe malnutrition in the Belet Hawa nutrition survey. In the context of the high prevalence of communicable diseases and the absence at the time of the survey of any selective feeding programmes in the district, mortality among the severely malnourished children is almost certainly extremely high.

SOCIO-POLITICAL FRAMEWORK OF GEDO REGION

Gedo region is situated in the southwest of Somalia, bordering both Ethiopia and Kenya. The region consists of seven districts: Garbaharey, Luuq, Belet Hawa, Dolo, El Waq, Bardera and Burdhubo. (See Map Page 12) 75% of the Gedo population (around 400,000) is composed of pastoralists, with the other groups defined as urban dwellers, agro-pastoralists and farmers along the Juba and Dawa rivers.

Gedo area is inhabited by people from different communities, among which the Marehan community represents the majority, especially in the southern part of the region. The population in the northern districts shows a wider variety of origins. These areas are also poorer and experience more marginalized conditions.

Although Siad Barre (President of Somalia from 1969 to 1991) originated from Gedo, and his military regime provided some support to the area, Gedo was and still is one of the most vulnerable parts of the country. The regime did favour some pockets of Marehan group elites and soldiers were recruited from Gedo. However, from a long-term development perspective, the majority of people living in the region did not benefit from such support. The main assistance to the area was provided through consistent food aid deliveries to Ogaden refugees in the area (since the late 70s) which, in turn, benefited local communities with cereal availability at cheap prices.

Gedo did however enjoy political support from Barre's regime for land encroachment at the expense of neighbouring populations. This meant Marehan-occupied lands became isolated and cut off. As relations with neighbours deteriorated it placed restrictions on human and livestock movements and on marketing options. Meanwhile, Barre's regime did little to develop an overall regional infrastructure and facilities in the area. ***The outcome of these events was a decreased resilience to crisis and a weaker capacity to cope, coupled with little integration with surrounding groups.***

Although Gedo's ecological conditions are amongst the most harsh and least friendly in Africa, there has been a continuous in-migration process into the area over the last few decades, due to a series of events. Starting from the influx of Somali refugees from Ethiopia during the Ogaden war, followed by the return of many Marehan groups from other areas of Somalia after the fall of Siad Barre's regime (1991) and IDPs from the neighbouring districts of Bay and Bakool arriving in the area following conflict in 1996. (For more in depth details see the Recent Timeline of Significant Events)

The consistent presence of displaced people and returnees who depend on their labour has given rise to a complex social and class system. On top of the clan structure, the in-migration fluxes has created another tier involving the historical residents – the *guri* – and the in-migrated groups – the *galti*, who have never established good relations. The poorest strata of society are most likely to sell their labour to survive, herding and collecting bush products, to slightly better off herd-owners. This allows better-off livestock owners to live in towns and have their large herds split in different areas and reared by the poorer pastoralists in exchange for milk. (This system is called *ades*). The very poor population strata consists mainly of IDPs, destitute groups (who lost their assets during conflicts), very poor pastoralists and agro-pastoralists who have dropped out from traditional social networks. These very poor groups are blamed as key agents of environmental degradation, as will be explained on page 3 of this Focus.

External support through kinship remittance is reportedly quite consistent in the area, especially for people living in the South. This is probably a result of the Marehan people, who previously held government related posts, using their opportunities to increase their wealth and eventually migrate. Due to the poor local facilities, remittances are brought in through Nairobi and Kenyan networks. However, this option has been severely curtailed by the shutting down of Al-Barakaat but other money transfer agencies are rapidly filling the remaining gap.

This social stratification does not allow for easy transference of additional support which is required by the **very poor** in times of stress. Compared with other pastoral areas, the very poor in Gedo usually get more kin support, but this is unlikely to increase during times of crisis. Moreover local kin support is often in forms of kind

(livestock and milk) money as a gift is currently limited by the poor environmental conditions. Most of the animals that would have normally been sent back to the dry areas to provide some support to the remaining households are still in Lower Juba, Bay and Bakool. Also kin support in the form of cash has diminished due to low seasonal demand for cattle in Garissa market (in Kenya) coupled with high cost of drugs to maintain the health of the out-migrated herds.

Transport-related problems in the area

Gedo's transport and communication infrastructure facilities are among the poorest in the country as they have never been consistently developed and now lack maintenance. A transport infrastructure and related facilities play a key role in developing market opportunities. Imported goods from Mogadishu, pass through Baidoa and can reach Gedo. Cereals from Bay region are also trucked to Gedo and there is some exchange between Gedo and the neighbouring district of Mandera in Kenya. Roads, however, have often been poorly constructed and the condition of existing roads is very poor. The climatic extremes, with flooding whenever it rains, have contributed to the deteriorating road system. Issues related to insecurity, such as freelance militia road-blocks (demanding bribes from the trucks) and land-mined areas are also believed to play key roles in limiting transport facilities. The high cost of fuel, imported from Mogadishu, has also added to transportation problems.

Table 1-Recent Timeline

RECENT TIMELINE OF SIGNIFICANT EVENTS IN GEDO

Apart from significant droughts in 1974, 1984, 1992 and the current spell, Gedo has experienced the following events that have consistently had an impact on the region's vulnerability, by reshaping the human as well as the ecological environment in the region.

YEAR	EVENT
1978	Influx of refugees from Ethiopia following the Somali-Ethiopia conflict
1991	Fall of Siad Barre and return of most Marehan people from other areas of Somalia
1992	General Aideed's USC/SNA attacks in the area left many people dead and all facilities destroyed if not looted.
1992	First Al-Ittihad forces activities reported in the region
1995-6	Fighting between SNF and At Ittihad. First invasion of the Ethiopian troops
1995-6	In-migration of people from the UNHCR refugee camps in NE Kenya
1996	Influx of IDPs from the conflict areas of Bay & Bakool
1997	El Nino floods and related disease outbreaks
1998	SACB ban on non-emergency assistance following a serious security incident
1999, 2000 2001	Kenya border temporary closures and livestock export ban from Gulf countries
2000-2001	Security incidents involving international NGO staff
2001	Northern districts under administration supported by Ethiopians

Conflict is a major feature of the area. Insecurity and community boundaries constrain people and livestock movements and avoid proper implementation of traditional coping strategies. This sometimes leads to members of a household and animals remaining in the region. They are left to manage in a difficult environment and often have no other strategy for survival other than waiting for either rains or aid or other forms of support. In northern Gedo, FSAU Field Monitors report that 90% of the remaining households are female-headed, while male members migrated months ago with bigger ruminants in search of better water and pasture.

The huge presence of weapons and landmines (especially in the area linking Belet Hawa to Garbaharey and also in a vast triangular area inside El Waq district) are also reported. Movement is difficult and tensions are even experienced amongst the same groups. Political stability is very fragile and there is no unified administration in the region, with every district having its own authorities based on clan and subclan boundaries.

These issues pose a major constraint and threat for the livelihood of local communities as well as to any external assistance. Few international agencies are currently active in the area while other agencies have reported security incidents. Following a very serious incident, SACB itself imposed a ban to non-emergency interventions in 1998 (eventually lifted in 2000). **Conflict-resolution strategies should be implemented to expand livelihood options and to improve the local working environment in order to trigger further assistance.** Such activities have recently taken place in Dolow, where community elders met to tackle and solve some outstanding conflict matters. Local authorities from Somalia, Kenya and Ethiopia have also met recently to discuss security-related issues.

In addition, over the last decade, parts of Gedo region, have experienced political governance from the Islamic fundamentalist Al-Ittihad group, which led to Ethiopian intervention in the mid to late 1990's. The international community also expressed concern about a possible fundamentalist community in the area, following the September 11/2001 attacks in the USA. However, in recent times, no major activity by fundamentalist groups has been reported in the region.

Implications of the socio-political framework on current food security in the area

- Sudden increase in population pressure due to in migrating fluxes
- Social stratification and increasing presence of destitute and vulnerable groups
- Weak coping capacities
- Very little development of social facilities and lack of basic services
- Poor communication and transport infrastructure
- Overall insecurity, social instability and tension among groups
- Little integration in the region and restricted movement and market options
- Landmine presence
- Little presence of assisting international agencies

RANGELAND RESOURCES OF GEDO REGION

The current condition of Gedo rangelands, once well known for its land cover density and biodiversity, have been badly damaged, over the last few decades, due to the huge influx of people and a sudden increase in livestock, putting great pressure on these naturally rich but fragile ecosystems.

The ecology of most of the region is structurally fragile, due to the inherent nature of the soil and rainfall patterns. Short and intensive rainfall on Gedo soil encourages erosion processes and soil components get washed away quickly through heavy run-off processes. The climate varies between arid in the northern districts to semi-arid in the south. Luuq is reported as one of the hottest spots in Africa and evaporation levels are very high (E. Williams in 1996 estimated them around 300 mm/month), with related consequences for surface rainwater storage. Long dry spells are common as well as torrential downpours and flash floods.

In recent times Gedo rangeland resources have been subjected to severe deforestation and overgrazing by the rapidly increasing population which has almost doubled since 1992. Most of the refugees converging on Gedo need instant shelter, fuel for cooking, grazing and water for their livestock. In addition one of the most regular income generation activities for the poor consists of selling bush products, such as firewood, charcoal and timber construction materials. In difficult times, more people are forced to resort to these strategies as other options run out.

The collection and sale of salt, frankincense and other gums (incense) and resins as well as wildlife hunting increase during difficult times. These strategies are used particularly by people living in the northern districts, due to the marketing options offered by the town of Mandera situated in Kenya on the Kenya/Somalia border.

As a result, total deforestation has taken place around some human settlements and intense overgrazing has hit areas surrounding water points. Increasingly, violent conflicts over natural resources may demonstrate links between political or social instability and environmental degradation in certain areas. The environmental impact of increasingly resorting to the collection of bush products should also be monitored as a long-term environmental risk factor. Loss of land cover is a major factor contributing to environmental degradation and the related decrease in land productivity. Climatic extremes, with recurrent droughts and wind erosion, are also contributing to these patterns. **As a result, the upland plains and highlands of Gedo areas are reported as one of the most eroded areas of the Horn of Africa (Trocaire, 1996). Signs of encroaching sand dunes have been observed around Belet Hawa, which warrant immediate intervention.**

These environmental degrading processes are not helped by the deteriorating structures that traditionally govern rangeland management and related responsibility roles. Destructive income-generation activities make protection of communal assets difficult, and contribute to a cycle of environmental degradation, which, in turn, increase vulnerability of the poorest groups. As natural resource management systems break down, increasing resource stress breeds further conflict, insecurity and ecological degradation (UNEP-IIED, 1996).

No soil and water conservation practices have been implemented recently and natural resource management regulations and land use planning strategies are not reported as being in place. Land recovery activities and forestation schemes are clearly needed. A number of reports with rangeland analysis in these areas have been published in the last two decades. These documents constitute an important resource for rangeland-related interventions.

Poor rainfall has led to a constant depletion of key pasture resources. The duration and the coverage of the present drought affected the north more than the south since proper rains have been lacking in these districts since the El Nino floods in 1997. In the southern districts the rainfall has been better, with some areas having benefited from the last *Deyr* rains. However, overall drought cycles in the area seem to be shortening, and the overall implications for future land use and natural resource management needs to be further understood.

Key geographical features of Gedo region

TABLE 2 : Key Geographical Features of Gedo Region

	HIGHLANDS	UPLAND DEGRADATIONAL PLAINS	ALLUVIAL MID-LANDS	ALLUVIAL PLAINS
Proportion	20%	45%	20%	15%
Land Cover	Scattered thorny bushes	Bushy & some trees	Perennial grasses, bushy and some trees	Cultivated areas
Land use	Grazing	Grazing	Rainfed farming	Cultivate by flood receding and irrigation
Environmental degradation	Erosion processes due to soil and rain nature, overgrazing and poor land cover: shallow soils and rock outcrops		Local bad-lands and sand deposits	Intense farming

Vegetation land cover in the area

The predominant vegetative cover in the area is prevailing grasslands (shrubs & grasses – mainly *Cassia & Euphorbia Spp.*) In the northern areas there is more browsing resources (bushes and trees – mainly *Acacia spp.* intermixed with *Cordia, Grewia*) In times of drought, when the water table becomes unreachable for the plants' rooting system, most plants enter into a state of hibernation in the await of next rains.

Water resources in Gedo

(with key inputs from the 1996 report 'Study for the rehabilitation of infrastructure – water supply and sanitation in Gedo Region' produced by Mr. Evan Williams for the EC Somalia Unit and available at FSAU).

Access to good water is the key factor constraining production in most parts of the Gedo region. Water also plays a key role in defining clan boundaries and the definition of *degaans* is used to describe a geo-political area. Once more, it is this combination of ecological and socio-political constraints that complicates proper water access and management.

Key water resources in the area are provided by :

- the two local rivers, Dawa and Juba
- the shallow water table through temporarily hand-dug wells or more permanent boreholes
- the swamps in the flood plains of internal drainage areas
- rainwater is also collected through run-off catchments in isolated sites in grazing areas

Permanent water resources decrease south-westwards and this is reflected in the price of water during the dry season. During this season, the distance travelled by livestock between water and pasture is great, as the main available pasture is in the internal highlands, whereas the only available water is along the river alluvial plains. The only areas with water are the settlements with shallow wells and those along the rivers, where the quality of pasture deteriorates rapidly. However, development of permanent water sources in Gedo region has been mainly hampered by the saline nature of the geological layers.

The *Juba and Dawa rivers* provide good water availability and quality for both people and livestock as well as for irrigation. Although the Juba river is perennial, the Dawa river dries during *Jilaal*. Access to river water poses no major problem, except for distance from grazing areas during dry periods.

The water table in most of the area is not too deep, so people communally dig temporary *shallow wells* to water their animals. These wells are mainly situated in drainage run-off plains and along river basins. It is reported that around 80% of livestock water is obtained from these sources dug in tog beds. Herds move away from the wells when the water table recedes, leaving the fodder species to recover. The system is such that water in good pasture areas is the constraining factor, and lack of water more than lack of pasture therefore forces the herds movements. These dug wells present some problems of efficiency as well as maintenance, given their state of continued collapse. Suitable structures and reliance on local energy sources (animal, wind, solar) could help relieve these problems.

Salinity complicates the use of well water, with salty water being currently reported in the important wells of Fahfadhun area (Bardhera district) and Garsalei (El Waq district). Salinity poses consistent limits on the development of *boreholes* in the area, together with maintenance difficulties. The permanent boreholes in Damsay (120 km SW Belet Hawa) and in Garbaharey (El Adde & El Gaduud) - which are considered vital for local livelihoods – are currently reported to be in poor condition, due to damage and poor maintenance.

Small dams, depressions and reservoirs in grazing areas in the uplands, constitute the main rainfall *water catchments*. Most of them have been in place for quite long time and are now silted up or of little use because of poor maintenance. The development of further surface water reservoirs is hugely constrained by local temperatures and high evaporation levels as well as by little traditional reliance on water trucking in the area.

The ecological balance between water and pasture is reportedly very fragile and any effort aimed at increasing livestock carrying capacity in the area through a random increase in available water may have disastrous results; only where there is an obvious surplus of pasture over available water should this be contemplated. The only areas that could meet these criteria are the western uplands and waterless zones in the extreme SE of the region (EC, 1996). The Western uplands in Gedo region show consistent potential for quality grazing and livestock production. Insufficient water points are currently hampering enhanced production levels. A ground water survey and related environmental impact report should be carried out to establish the local potential for water development. At the same time transport facilities should nevertheless be developed if these production potentials are to be fully exploited.

Apart from the difficulty provided by the water table levels and the salinity characterising Gedo region, the water infrastructure has also suffered from the local socio-political events of the last decade, with many facilities being looted or poorly maintained (especially following the El Nino damages). The environmental as well as the social conditions need to be analysed if future interventions enhance effective and sustainable development. E. Williams (EC, 1996) proposed the establishment of a training centre teaching water development in the area. Better understanding about sustainable exploitation of underground water resources could be discussed with the staff of the "FAO - Somalia Water and Land Information Management Project", managed by Mr. Chris Print at FAO Nairobi office.

TABLE 3 : Most recent population figures (WHO 2001 + FSAU breakdown by FEZ)

DISTRICTS	POPULATION	FOOD ECONOMY ZONES			
		AGRO-PASTOR.	RIVERINE	PASTORAL	URBAN
BARDERA	90,000	35%	15%	35%	15%
BELET HAWA	65,000	10%	5%	55%	30%
BURDUBO	25,000	35%	45%	15%	5%
DOLO/GEDWEIN	45,000	15%	10%	70%	5%
EL WAQ	30,000	5%	0%	85%	10%
GARBAHAREY	35,000	30%	0%	65%	5%
LUUQ	65,000	25%	15%	50%	10%
TOTAL	355,000	20-25%	10-15%	50-55%	10-15%

Implications of rangeland resources for current food security in the area

- Ecologically fragile environments constraining coping strategies
- Harsh climatic extremes (drought spells and flash floods)
- Consistent ongoing deforestation and overgrazing - loss of land cover and related land degradation trends
- Lack of income-generation activities not related to range-land exploitation
- Exceed carrying capacity
- Erosion of traditional rangeland management communal mechanisms
- Problems related to quality water availability and access (salinity, low table, distance from pasture, evaporation levels, maintenance of facilities, pricing).

PRODUCTION SYSTEMS IN GEDO REGION

The major production system in Gedo region is mainly pastoralism, with minor groups practicing agro-pastoralism and farming activities, along the river Juba. Interactions among these groups are quite usual on an inter-seasonal basis but become particularly important in times of hardship. This year, due to the lack of pasture, riverine farmers partly shifted from maize (grain) production to fodder production. This situation mainly benefited the farmers with irrigation facilities (high price of the fodder as an incentive). It also helped the livestock owners to maintain their remaining animals when hand-feeding was required.

• Pastoral Production Systems

Livestock production and marketing represent the key asset for most of the people in Gedo region, both in terms of access to food (direct consumption) and access to income, through livestock trade or marketing of livestock products (milk, hides and skins). Pastoralists in Gedo can be split into 2 major Food Economy Zones (FEZ's):

Dawa Pastoral FEZ in the north

Southern Inland Pastoral FEZ in the south

In the two FEZ's, there is a clear distinction between the different asset types and numbers in each area. (See Table 4). It is interesting to note that in terms of cattle the two areas are similar but they show quite different figures for shoats and camels.

Goats, sheep (shoats) and cattle represent the predominant species in the north of Gedo, with cattle normally grazing in the areas closer to the Juba valley. An increase in sheep and cattle has been observed as these animals are more easily marketed in Kenya. The result is a reshaping of local herds, resulting in a dramatic drop in camel numbers.

Cattle is more widespread in Dawa FEZ because there are more permanent water sources, consisting of both the Juba and Dawa

rivers and the water table is nearer to the surface. There is more grazing, despite the fact that the north is drier and grass types in the area are more diverse.

The importance of camel gradually increases in southern inland areas, where there are little permanent water sources and the vegetation is thicker and located on the plateaux and hills. Markets are also further away.

More than half of the livestock is concentrated in the internal drainage run-off flood plains, where also crop areas are concentrated. (Donkeys have traditionally had specific importance for packing and transportation, more in the northern zone than in the south, where camel herds are used.) Donkeys fit better in the livelihood of Dawa pastoralists (relying on them for collecting bush products and they are easier to manage with sheep and goats).

Seasonal migrations in search of better water and pasture are usually not very extensive in Gedo. (See Table 5) **Degaan** ranges are normally associated with sub-clan boundaries and hinge on water resources and livestock disease prevalence. During the rainy season livestock graze closer to the homesteads, while during **Jilaal** periods animals move along the Juba river or to Bay and Bakool areas. Good grazing zones are the coastal areas around Kismayo, the areas along the rivers and around Fahfadhun, in the western highlands between Bardera and El Waq. Water quality (salty) and availability (lowering water table) represent a key constraint during dry spells. Garbaharey has two important permanent boreholes. After the Gu 2001 rain failure, it is estimated that almost 90% of shoats, 40% of camel and 20% of cattle remained in northern Gedo. Most of the other animals moved out during the May and August 2001 migrations (mainly to Middle/Lower Juba, Bay and Bakool regions).

Table 5 — Migration Patterns in Gedo Region

Dawa Pastoral FEZ - northern districts	Migration pattern	Southern Inland Pastoral FEZ
Minimal movements, mainly along Dawa and Juba rivers, within Gedo (south of G/harey) and parts of El Waq	Normal migration in Jilaal	Limited movements within the district, along Juba river and G/harey boreholes or to permanent wells.
More options available: along the rivers (Dawa & Juba) down to Bardera, to Bay and Bakool, to Afder and Gode (Ethiopia) and Mandera district (Kenya)	Abnormal migration In case of dry spell	Mainly to middle and lower Juba valley; Bay Region (Dinsor and Q/dhere areas), parts of Garissa and Wajir districts in NE Kenya

Table 4 — Wealth ranking and herd composition in the 2 pastoral FEZs

GROUP	Asset : Cattle		Asset : Camel		Asset : Shoats	
	Dawa Pastoral	S.Inland Pastoral	Dawa Pastoral	S.Inland Pastoral	Dawa Pastoral	S.Inland Pastoral
Very Poor	3-5	2-4	3-5	5-15	30-40	15-25
Poor	10-15	5-10	5-10	20-30	60-80	30-50
Middle	15-30	15-25	10-25	40-60	100-150	60-90
Better Off	30-40	30-40	20-30	70-100	150-200	100-250

Shoats did not migrate due to the following factors:

- Unlike the big ruminants, shoats cannot move to far place in search of pasture
- Shoats represent the main asset determinant
- Difficulties of adaptation to climatic and soil condition
- Susceptible to endo-parasitic diseases mostly common in other areas of the neighbouring regions
- Easily expendable for immediate family needs
- Dawa Shoats are able to graze around the riverine areas without suffering much from the riverine related livestock diseases.

Due to poor availability of adequate pasture and water, the animals that remained in the region have tended to concentrate around permanent water points in Garbaharey, El Waq and Bardera which have benefited from recent **Deyr** rains. They are fed with mainly relief-cereal, purchased fodder, crop residues or wild fruits. This results in huge environmental pressure, overgrazing, very little productivity and risk of disease outbreaks. The market value of these animals is inconsistent, as prices have been cut in half and

still herders are unable to sell due to the competition of Ethiopian livestock, which is in far better condition.

Livestock in this condition should be considered as a 'negative asset', which does not produce staples, carries no value but still needs labour for tendering, as well as livestock feeding and watering (currently requiring cash) as well as veterinary drugs. FSAU Field Monitors report that, as an average and given current prices, one animal eats and drinks its own value in about ten days. Although shoat herds are quicker to recover, this long drought will definitely have a long-term impact on local herds **and it is likely to increase the number of destitute pastoralists in the area, especially in Gedo northern districts.**

Livestock death rates are particularly high amongst the remaining animals, particularly shoats. Average death rate for sheep and goats was estimated at about 40-50% in the last year, coupled with a huge drop in productivity of surviving animals. Medium term calving rates and milk production have been affected by current conditions, so that most of the food and income sources will not be available for some time. Most animals have been extremely weakened by the climatic conditions and are therefore consistently suffering from diseases which would normally be tolerated. Most of the locally reported diseases are in fact endemic diseases, which affect local livestock, in an area that is quite well known for bearing consistent tick infestations and insect-borne diseases.

No animal health service is reported in the area, availability of expertise and drugs is almost non-existent and it seems the issue has not been properly addressed in recent times. There is no coordinated system of drug supply established in the whole province. Kenya towns along the border with Somalia are the main sources of drugs and assistance for these pastoralists. The other source of drugs is Mogadishu. The livestock owners as well as the few drug peddlers who FSAU talked to had very scanty knowledge of the drugs in their possession. The Community Animals Health Workers (CAHW) system recently set up by the NGO EPAG (K) in the area is claimed not to be performing effectively. CAHWs have no drug kits and equipment to practice and inadequate training. Increasing the problem, the communities have not recognized and accepted the CAHW system to treat their animals (VSF-Swiss, 2001).

Typical local livestock diseases

Livestock health conditions in Gedo region are of concern, especially for camel and small ruminants affected by a number of diseases. In Gedo, camel are suffering from trypanosomiasis, often complicated by pneumonia and other infections. Cattle have been affected by trypanosomiasis, anthrax (*Kud*) and foot and mouth (*Abeeb*) diseases. A recent VSF-Swiss study reported that the main shoat diseases in the area are constituted by elminthiasis (*gooryaan*) & tick-borne diseases. Apart from these, the most common sheep disease are (in order of incidence): pneumonia (*Qufac*), tick paralysis (*Shilin*), Diarrhea (*Shuban*), cough (*Furuq Naylood*) and pox (for lambs). Worm is also the most common goat disease followed by contagious caprine pleuropneumonia (ccpp – *Sambab Ari*), goat Pox, pneumonia, respiratory tract infections (coughs) and tick paralysis. Bloat and foot rot were also mentioned as big threats but only occur during the rainy seasons.

If livestock conditions are not taken into consideration in the definition of intervention strategies, this is likely to affect the outcome and the effectiveness of the intervention itself. Most households are reported to share their food-relief rations with livestock or sell them to purchase fodder and water for the animals. Even in this drastic situation, livestock still seem the only reliable asset which people invest in. Asset diversification during these periods (and most sensitively as a preventive measure) should be considered to help relieve these vulnerable groups and create some opportunities.

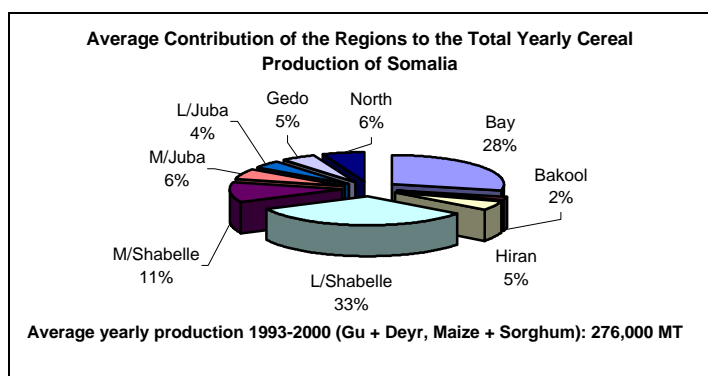
It is also worth noting that it is not only poor pastoralists who are affected by the current situation, but even wealthier pastoral groups have also suffered livestock losses and they too rely solely on livestock for food and income, with very little chance of economic diversification.

Agricultural production systems

Agro-pastoral and riverine population groups are in a minority in Gedo. The contribution of the region to the annual cereal production of Somalia is usually relatively small (about 5% of the post-war average production, see Chart 1).

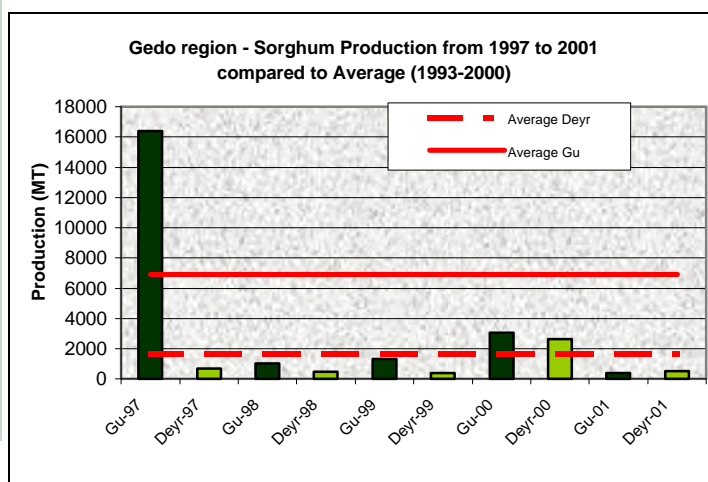
The average annual cereal production of the entire Gedo region does not exceed 15,000 MT, of which 60% of sorghum and 40% of maize. Rain-fed sorghum is exclusively produced in the agro-pastoral areas while irrigated maize is produced along the rivers. Potential for both rain-fed and irrigated agriculture is the highest in Bardera district (southern Gedo). Rain-fed agriculture (sorghum) is marginal in all northern districts.

CHART 1 : Average Contribution of the Regions to the Total Yearly Cereal Production of Somalia



Maize production by the riverine FEZ does not fluctuate. It has been relatively stable between 1998 and 2000 (in the range of 9-11,000 MT/year) before dropping to a lower level in 2001 (still slightly above 6,000 MT). During the same period of time, generally very poor sorghum crop results were recorded (see Chart 2).

CHART 2 : Gedo region - Sorghum Production from 1997 to 2001 compared to Average (1993-2000)

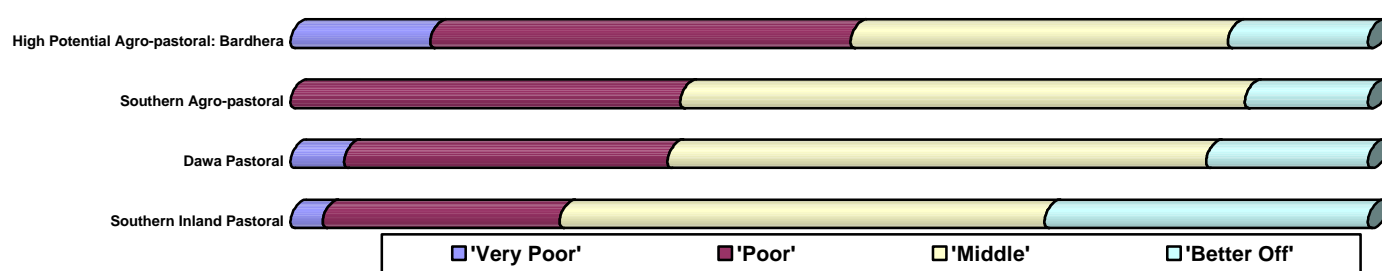


As elsewhere in southern Somalia, **Gu** is the main cropping season (harvest in August) and **Deyr** is the secondary season (harvest in January). After the exceptional **Gu** 1997 sorghum harvest, all **Gu** seasons that followed have been by far below normal (total crop failure in 1998, 1999 and 2001). **Deyr** sorghum production has also been below average for several years, with the exception of the **Deyr** 2000. In 2001, northern Gedo underwent a bad sorghum crop failure both during the **Gu** and the **Deyr** seasons (2/3 of the total cereal production of the region – sorghum and maize combined – were harvested in Bardera district). In normal times, Gedo is highly dependent on cereal supplies from neighboring regions (particularly from Bay region, which produce the bulk of the sorghum production of Somalia). This situation has been exacerbated by the recurrent crop failures in the rain-fed areas of Gedo.

TABLE 6 : Main Features of the two pastoral Food Economy Zones (FEZ's) in Gedo Region

<i>Dawa Pastoral FEZ - the north</i>	<i>Feature</i>	<i>Southern Inland Pastoral FEZ</i>
Rangeland Resources		
Flat alluvial terrain with few hilly areas	Terrain	Mountainous mid/highlands
Shrubs & grasses; good vegetation diversity	Land cover	Thicker vegetation, dominated by the <i>Acacia-Commiphora</i> bush land – more browsing options
Loamy-clay	Soil	Red sandy loamy or <i>Rhamo</i> towards the west More clay (<i>Adable</i>) towards the south - Rocky areas in the uplands, while soil gets better on mountain bases
Average rainfall would be 200 to 250 mm/y.	Rainfall	Average rainfall would be 350 to 450 mm/y. This year's <i>Deyr</i> rains have been fruitful in these areas.
More water sources and almost permanent from the rivers; water table is higher.	Water	Limited water sources. Key sources from boreholes, seasonal streams & some scattered wells (mainly Fahfahdun & Garsali areas)
Dawa river dries up; Water availability is labour intensive (community-dug shallow wells) and quality decrease due to salinity	Water during Jilaal	Water availability decreases consistently due to salinity and water price raises, problems are also related to the huge water-pasture distances
Intense hunting activities reported	Wildlife & wild fruits	More wildlife hunting and gums and resins exploitation
Livestock Production System		
Shoats predominant and determinant asset; cattle along Juba areas. Increased importance of donkeys for transport and packing	Herd composition	Camel represents the main asset followed by shoats and cattle
Tick infestations & related diseases; same disease ecology as Bay & Bakool areas	Disease	Livestock disease prevalence is higher, with Helminthiasis & Tse-tse fly
Move to Juba/Dawa rivers. Ethiopia. Bakool and Bay regions	Big ruminants feeding during Jilaal	Back to permanent water points, Juba valley, boreholes, and shallow wells.
Marketing Options		
Main purchasing market is Luuq	Cereals	Main local market is Bardera
Mandera: cattle & shoats Bakool-Hiran-Bossaso-Gulf: shoats Baidoa-Mogadishu: camel	Livestock	Garissa & Wajir: cattle & shoats Baidoa-Mogadishu: camel
Milk marketing is more developed due to more sophisticated market	Milk	Camel milk is the main milk marketed; problems of distances between production and consumption areas.
Socio-Political Conditions		
Ethiopian presence improves security	Security	Quite dangerous; very fragmented territory
Consistent presence of minorities	Community composition	Mainly Marehan groups, except in El Waq
The movements and relations with the surroundings are less constrained	Relations with surrounding groups	More difficulties and movements restricted by clan conflicts although pastoralists could migrate following regulations in the area
Overall remittance access limited due to little diaspora links	Remittance	Remittance better than Dawa. People in these areas affiliate with former regime and higher migration to foreign countries

CHART THREE : Wealth Breakdowns of the four main food economies in Gedo



Implications of the local production systems for current food security in the area

Consistent livelihood asset depletion (especially livestock)
 Livestock as a 'negative asset' in critical times (competing on key resources)
 Reduced market opportunities
 Traditional livestock disease prone areas and health-related problems
 Recent market-oriented shift towards more drought-prone herds
 Degradation of range resources
 Constrained mobility options
 Kin support livestock stuck in surrounding areas
 Scarcity of veterinary and agriculture inputs
 Farming production shift from cereal to fodder

MARKET OPTIONS IN GEDO REGION

CHART 4 : Food Sources for the 'poor' in S. Inland Pastoral FEZ

Food Sources for the 'poor' in the Southern Inland Pastoral Area

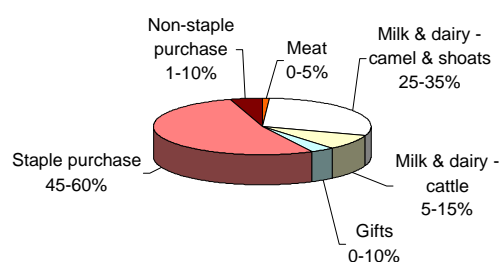


CHART 6 : Income Sources for the 'Poor' in Dawa Pastoral FEZ

Income Sources for the 'Poor' in Dawa Pastoral area

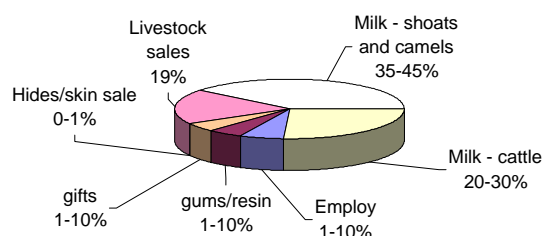
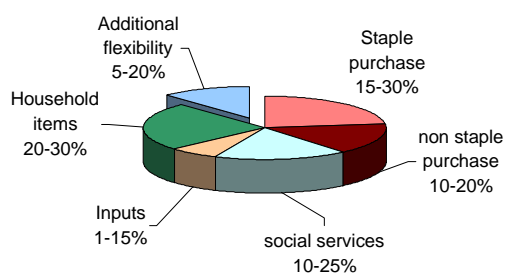


CHART 5 : Expenditure for the 'poor' in Dawa Pastoral FEZ

Expenditure for the 'poor' in Dawa Pastoral area



For many years the rural population in Gedo has been integrated into market-related activities (see above charts). It is reported that most rural households purchase or exchange the bulk of their food intake. This reliance on market exchange has both a positive and a negative impact on livelihoods.

The market-integration of pastoral communities is driven by an increasing need for cash for livelihood purposes (to purchase staples, water and drugs) and this has increased over the last decade, creating a major reshaping of herd composition and overall livestock population. As stated before, there has been a shift from camels and goats to increasingly sheep and cattle which are easier to sell in Kenyan livestock markets. However, this has created a problem since cattle and sheep are more vulnerable to livestock disease in certain areas of the region. ('Camel lands' by Barkhadle A.M.I., 1993).

Gedo pastoralists depend heavily on Kenyan livestock markets, especially for their cattle and their peak sale period is just before Christmas time. Of the livestock sold in the NE Kenyan markets, 65% come from Somalia but competition with neighbouring Ethiopian and Kenyan pastoral production areas is quite great, although the Somali herders have to face fewer institutional costs and constraints. The prices in Kenya are higher than in Somalia but follow a similar seasonal pattern. While no reliable records of these trades are available, livestock trade with Kenya has reportedly increased after the export ban imposed by the Gulf countries. Some reports express that in 1999 on average at least 1-2 thousand animals a week were leaving Somalia for Kenya. Livestock is also traded towards northern seaports (through Ethiopia or via Bakool-Hiran-Bossaso) but this trade is currently affected by the livestock ban.

TABLE 7 : Main Livestock Market Options

Animal	Market
Camels	Mogadishu slaughterhouse
Cattle	Kenya markets in Mandera, Garissa and Wajir.
Shoats	Commonly sold at local markets. Export quality animals are sold through Mandera, Garissa and Wajir in Kenya or, more seldom, through Bossaso (via Bakool & Hiran) or Berbera (through Ethiopia Region Five via Yirowe) to Gulf countries.

Due to insecurity, trade routes for imported items (mainly from Mogadishu) change continuously, while livestock trading routes tend to be more stable. The current RRA control of Bay and Bakool region has led to diminished access to trade routes which link with Mogadishu and Kismayo seaports and curtailed important traditional market networks, resulting in higher risk and related cost for products. Problems have also been recently posed by the closure of borders with Kenya (in 2000 and 2001).

Table 8 : Major Kenya-Somalia cross-border markets

NE Kenya			Somalia
65% of marketed livestock comes from Somalia. Most of food and non-food items consumed in the areas are also coming from Somalia			Southern Somalia pastoralists highly rely on NE Kenya livestock markets, especially for cattle. Manufactured items can be imported from Kenya
NE Kenya	Somalia	Major crossing points	Notes
Mandera	Belet Hawa		Constant safety and food insecurity in the area Major imported stuff trade to Kenya and little cereal trading
El Waq	El Waq		Major flow of livestock Little Trading of imported goods
Garissa	Dhoble		Major cattle market to Kenya Little imported food, especially for the refugee camps

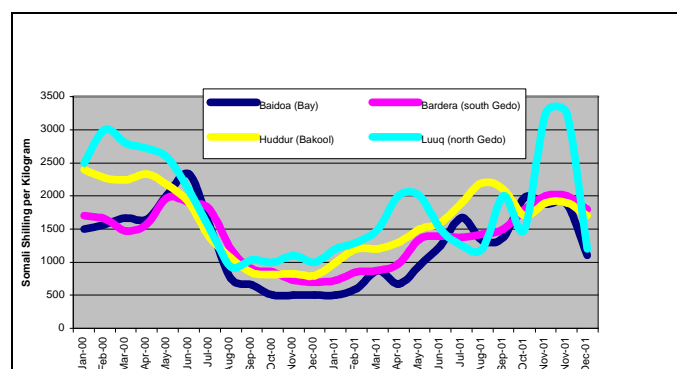
Apart from the livestock trade, milk production and marketing traditionally represent a vital asset for both consumption and exchange patterns in Gedo. This is possible due to the extended network of town and urban centers and the exchanges with riverine farmers. Milk is normally transported directly by women to the nearest markets (distances of about 30 km/day are not uncommon), with very little use of cars, trucks and market intermediaries. This is mainly due to the problems related to transport and insecurity. It is reported that the distance between milk production and consumption areas could represent a problem during some periods (60 to 100 Kms). Some Gedo areas have potential for extended milk and meat production and marketing, but the physical barrier imposed by poor infrastructure conditions severely impedes the development of market opportunities. This results in currently limited marketing options and unfavourable terms of trade (somehow buffered by the surprisingly low price of cereals in the area), especially for pastoralists. During dry periods, lactating animals are usually sent down along the Juba river and to Bay and Bakool. Accessibility to milk becomes very low for the remaining household members. Currently, the local milk production dropped to almost zero and only few households have received healthy livestock from relatives as kin support mechanism.

Gedo Compared to cross-border regions

The neighbouring regions of Gedo are Mandera in Kenya and Dolow in Ethiopia. These areas are mainly inhabited by Somali Ogaden, Dagodye and Garre communities. A cross-border analysis of these three regions, who all rely on pastoralism as a productive system, has produced the following comparative information. Market integration is important in all three regions, as most households obtain the bulk of their staples through market exchanges and cross-border trade. Cattle trading with Kenya represents the most significant market option, followed by local milk sales and complemented by the collection and sale of bush products. Unfavourable terms of trade for pastoralists in critical times as well as a lack of storage facilities represent livelihood constraints in all three regions. Enhanced security and the development of road networks have encouraged market integration in Mandera and Dolow districts, compared to Gedo. In Dolow and Mandera, veterinary assistance and related drugs are more likely to be available than in Gedo. Relief food deliveries are reported in all three areas.

Market situation—Recent trends

CHART 7 :Comparative Sorghum Prices in Selected Markets, From January 2000 to December 2001



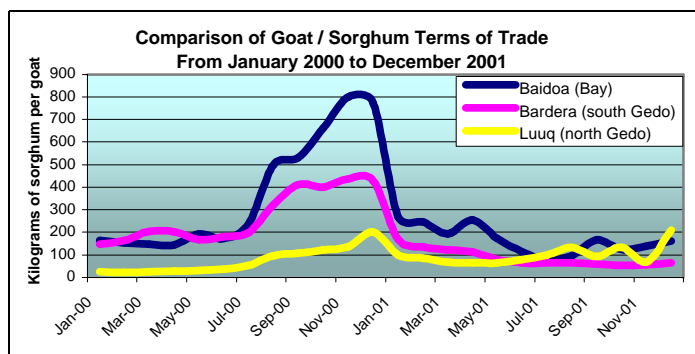
1. Sorghum prices

Although staple food commodities are always more expensive in Gedo than in Bay and Bakool, cereal prices are generally following the same trends in the three regions. After the overall good **Gu** 2000 harvest, sorghum prices dropped dramatically everywhere in southern Somalia. Post-harvest prices reached extremely low levels with a minimum of 500 Somali shilling/kg in Baidoa (Bay). When expressed in dollars, the value of sorghum came down to less than 0.10 USD per kg in most southern markets including Gedo markets. Sorghum prices started to increase gradually from the first quarter of 2001 almost up to the end of the year. Indeed, prices did not drop significantly after the very poor **Gu** 2001 rain-fed production. It stabilized for a short period in Bay and even increased further in Bakool and Gedo. It is worth noting that, in dollar terms, sorghum has been much cheaper throughout 2001 than during any other previous years (this being due to the devaluation of the Somali currency).

Finally, a significant drop in sorghum prices – expressed in Somali shillings - was observed in Baidoa in December 2001 due to good prospects for the Deyr cropping season in Bay. Prices also started to decrease in Bardera (south Gedo) and Huddur (Bakool), but to a lesser extent. In northern Gedo, the huge fluctuations observed in Luuq market can be explained by the timing of the food aid deliveries (no cereal in the market other than relief food).

2. Local goat/sorghum terms of trade

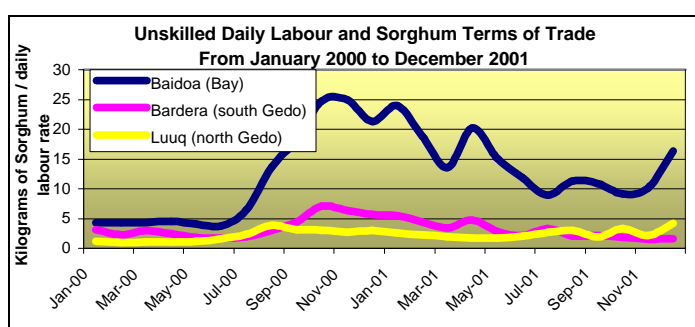
CHART 8 : Local Goat / Sorghum Terms of Trade



Local goat prices expressed in Somali shillings have tended to increase in the second half of 2000 (general trend for southern Somalia). This is however not observed when goat prices are expressed in dollars (fluctuation around an average value of 10 USD/goat). From the animal seller point of view, terms of trade (TT) for goat against sorghum greatly improved in the second half of 2000 that is after the **Gu** rainy season (increasing goat prices, very low cereal prices). TT drastically dropped at the beginning of 2001. Gradual deterioration of TT occurred up to July/August 2001. TT in Bardera (south Gedo) are now one of the lowest in southern Somalia. High values shown by the graph for Luuq (north Gedo) by the end of 2001 are not reflecting the exact reality of the market situation (very low market activity, very few marketable animals left).

3. Unskilled labour/sorghum terms of trade

CHART 9 : Labour / Sorghum Terms of Trade



Unskilled labour rates in Gedo are the lowest in southern Somalia (stabilization at about 3,000-4,000 Ssh/day since the beginning of 2000 up to the very end of 2001 in spite of the inflation). Job opportunities are very limited compared to the neighboring Bay region which provides agricultural labour. Terms of trade for unskilled daily labour/ sorghum are much more favorable in Bay than in Gedo.

4. Household energy sources

The collection of bush products constitutes an alternative source of income for poor households in Gedo. In Luuq, the value of one bundle of firewood gradually increased from 500 Ssh in January 2001 to 1,000 Ssh in December 2001. The price of charcoal, which had been stable in Luuq for a long period (about 5,000 Ssh/50 kg bag throughout 2000), drastically increased in

the second half of 2001 (fluctuation between 10,000 and 20,000 Ssh per bag). Other household energy sources also tend to increase. As an example, one liter of petrol was exchanged for about 12,000 Ssh in by the end of 2001 compared to about 6,500 Ssh one year ago.

Implications of available market options for current food security in the area

Heavy dependence on market exchange for food intake
Major constraints to market networks and trade routes
Conflict and insecurity increasing risk and resulting in high prices
Livestock trade competition from Kenya and Ethiopia
Limited options for income diversification
Impact of the livestock ban

FOOD SECURITY : SHORT TERM PROSPECTS

Food aid needs have been significant in 1999, 2000 and 2001. In 2000/2001, the food crisis was already latent but the huge amount of food aid distributed to the bordering areas of Kenya and Ethiopia acted as a major mitigating factor. At the same time, direct food assistance to Gedo was also being provided by the International Organizations. In 2001, the total quantities of food distributed in Gedo amounted to above 10,000 MT (mainly in the form of emergency free food distributed by CARE in the northern districts). The level of intervention drastically increased in October 2001 with more than half of the food being distributed during the last quarter of the year. Starting from December 2001, the food basket also improved in terms of quality with the addition of oil and lentils to food rations. In the actual context, food assistance is definitely playing a more important role than the marginal agricultural sector (the average annual cereal production of the region – excluding Bardera, which is the most productive and least vulnerable district – is in the range of 3,000 to 3,500 MT). A slight improvement of the overall situation of Gedo is foreseen in the coming months due to the following key factors:

- expected positive impact of relief food assistance (improved quality/ adequate quantities) and expansion of supplementary feeding programmes
- good sorghum Deyr 2001/2002 harvest in the neighboring Bay region in general (cereal availability)
- good pasture opportunities at present for out-migrated livestock (Bay, Bakool, Lower and Middle Juba) and possibility of selling milk by pastoralists to agro-pastoralists.
- Next Gu rains expected in late March and early April (possible return of livestock to Gedo)

However, even if the impact of the above-mentioned factors materialize, complete recovery will not be instantaneous. The alleviation process could be undermined by insecurity. Immediate needs will still have to be met (continuation of short-term emergency interventions at least up to June/July 2002). On the other hand, in the absence of a long-term strategy, chronic dependence on relief food is likely to increase.

The region of Gedo has great potential with key regional links to Mandera (Kenya) and Dolow (Ethiopia), fertile soils and opportunities for irrigation along the Juba and Dawa rivers, a shallow water table and good pasture areas, consistent and biodiverse natural resources, established international networks and access to remittances. Despite this potential, the livelihoods of people living in Gedo is continuously under threat as shown by chronic malnutrition rates, weak coping capacities, consistent social stratification and political fragmentation, little level of integration with the surrounding areas, constant vulnerability and food insecurity of poorer groups, degrading environmental conditions and increasingly unfavourable terms of trade for the majority of the population (pastoralists). Long-term orientated interventions should focus on pastoralists without neglecting the high potential represented by riverine agriculture.

POSSIBLE INTERVENTION STRATEGIES IN GEDO REGION

Activities of international agencies in the area have been faced with travel restrictions, threats, landmines and general insecurity. Difficulties in recruiting appropriately qualified personnel have also proved to be an enormous constraint. ***The overriding priority therefore has to be the facilitation of a more secure environment where the local people can strengthen their traditional coping mechanisms and where assistance and development organizations can operate.***

The international community has also agreed that interventions need to be developed to reduce the chronic dependence of the population of Gedo on food aid. The occasional slide into crisis that warrants large scale emergency intervention has to be avoided. With this in mind, the following are possible **Guidelines for Interventions** :

- (1) Local networks and relations should be carefully analyzed and understood before starting any initiative as well as use of local staff whenever possible, with outsiders coming and going whenever needed.
- (2) Assistance strategies should address and involve key community stakeholders, leading elders and authorities; women and children (not often targeted in livestock-related interventions), traders and veterinarians (for market and livestock health related activities), poor destitute groups (key players for sustainable natural resource management).
- (3) Assistance strategies should address underlying causes of this critical situation and complement different interventions in the area.
- (4) Community participation and strengthening of local capacities should be priority when implementing intervention.
- (5) Pastoralist groups would need specific targeting as they have been increasingly excluded from resource distribution by wealthier urban groups.
- (6) Traditional knowledge (e.g. animal health techniques) and strategies (e.g. coping mechanisms) should be actively integrated into sustainable interventions.

While current food intake is indeed a problem in the area, needs prioritization by the local populations has not always been food orientated and requests depend on the location of people (e.g. water is prioritized far from the river areas, while mosquito nets are a priority for people settled along the rivers) and activity (e.g. IDPs will express different needs from pastoralists). Main expressed areas of concern include: water provision and sources rehabilitation, basic infrastructure and shelter, social facilities and services (such as health care), security, assistance for veterinary services and livestock marketing. FSAU therefore suggests the following areas of intervention to consider (not in priority order):

Concern for nutritional and food security as well as health-related issues should be of priority, given the current critical levels of food intake and quality water availability. As suggested by the FSAU nutritional team, there is an urgent need to establish a comprehensive health and nutrition intervention programme including therapeutic feeding and decentralised supplementary feeding or addition of blended food to the general ration, accelerated immunisation and stronger support to basic health services.

Access to quality water is increasingly becoming a major constraint to human lives in the area. Water trucking in the area is not usual and is very expensive. Options should be analysed to provide water in key areas through rehabilitation of existing water sources. Enhanced water availability in areas where good pasture is available (western highlands) could trigger livestock production and marketing. Social and environmental implications should nevertheless be clearly assessed beforehand. Looking ahead, training opportunities for sustainable water development in the area should be researched.

Alternative income-generation opportunities that would avoid further environmental degradation and would allow people to keep and consume food-relief rations should be set up. Given the poor development and status of local infrastructure, social activities aimed at developing and improving regional marketing, transport and communication infrastructure could be planned on a food- or cash-for-work

basis. Drought contingency planning associated to employment-generation schemes for communal labour could also be established with these respects. These options would allow investing resources in the area on a longer-term basis. Labour availability should nevertheless be assessed beforehand. Setting up of grain stores or fodder production could also represent possible options with respect to diversify economic efforts.

Livestock health should be an issue of concern for current and future interventions. People in Gedo always prioritize livestock disease as a major problem affecting their livelihood even in non-exceptional periods. Nowadays livestock weakened by climatic stresses are paying a high price due to drought conditions and local traditional disease, as their coping capacity is hugely reduced. Assistance through provision of livestock drugs would be more effective on preventive basis or where outbreaks of epidemic diseases are reported, which is not the case in Gedo. Experiences in other areas of the Horn of Africa (and recently in Sanaag through Candle-Light NGO) nevertheless have shown that drug-related interventions with anti-helminthiasis or against tick infestation could bring some improvements in animal conditions and therefore help resistance during the harsh period and improve livestock productive performance.

A 1995 EPAG local report claims that pastoral community level training is to be preferred to individual para-vets, which have proved to have loose links to the pastoral communities. Treatment to individual animal heads have little effectiveness if the whole herd conditions are degraded, as the risk of re-infection is very high.

Destocking strategies could also be proposed in exchange for some assistance and servicing, such as water or veterinary interventions. The rationale would be to diminish the livestock burden by improving the conditions of the remaining ones. It is believed that most remaining livestock will not easily survive the next **Gu** rains in their current condition. Although natural destocking is an ecological process, the lower social strata will find themselves destitute should this occur without any planned vision. The effective use of de-stocked animals could be negotiated with key local stakeholders. (e.g. nutritional purpose). Positive experiences and lessons learnt with respect to destocking could be grasped from similar experiences in Kenya and Ethiopia.

Some forms of intervention could also take place by acting through Gedo-surrounding areas and therefore enhancing and exploiting local networks. We have seen how local kin support strategies are hampered by livestock-health related problems in the Juba valley or in Bay and Bakool areas. The same market networks should be better understood to enhance income-generation opportunities or to subsidize locally-produced food support (e.g. milk import from surroundings).

A key area of concern in the long-term is the improvement of natural resource exploitation as well as rangeland management. Environmental schemes on a food-for-work basis could be applied, especially with regard to afforestation/reforestation, pasture reseeding, rainfall water management and soil fertility schemes (once climatic/ecological conditions allow). All the same, key guidelines for land use planning and natural resource management should be negotiated with local communities. This process is not only a technical one but involves a shift from the current natural resource management strategies. This shift should be carefully negotiated and carried out with the full support of local communities. Some lessons with this respect could be grasped from the joint FSAU/UNCU efforts towards Disaster Prevention and Preparedness participatory workshops in Puntland areas in 2000 and 2001, where mainly environmental-related issues were tackled with local communities. Community-awareness could also be started among the new generations through the schooling system (wherever in place).

Conflict resolution efforts and strategies should be put in place to start tackling some of the long-standing problems in the area. Vulnerability of Gedo people is closely intertwined with lack of access to key rangeland resources and marketing options. Migratory strategies are also limited and this pose consistent problems during critical times. It is stated that increased security in the area and improved overall working conditions could facilitate external intervention and support.

THE FOOD ECONOMY ZONE MAP OF GEDO

